

What Is Claimed Is:

- 1 1. A split gate flash memory, comprising:
 - 2 a substrate with a trench therein;
 - 3 a drain in the bottom of the trench;
 - 4 a source in the substrate outside the trench;
 - 5 a striped floating gate disposed at a sidewall of the
 - 6 trench, wherein one side of the striped floating gate is near
 - 7 the bottom of the trench, and the other side of the striped
 - 8 floating gate protrudes above the substrate;
 - 9 a control gate winding along the floating gate, wherein
 - 10 one side of the control gate is near the bottom of the trench,
 - 11 and the other side of the control gate is outside the trench;
 - 12 and
 - 13 a metal bit line connected to the drain.
- 1 2. The split gate flash memory as claimed in claim 1, further
- 2 comprising an oxide layer surrounding the striped floating gate,
- 3 the control gate and the substrate.